



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10**

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REGIONAL  
ADMINISTRATOR'S  
DIVISION

November 3, 2022

Wendy Huber, Planning and Environmental Specialist  
Bureau of Land Management  
c/o Ambler Road Scoping Comments  
222 West 7<sup>th</sup> Avenue, Stop #13  
Anchorage, Alaska 99513

Dear Wendy Huber:

The U.S. Environmental Protection Agency has reviewed the Bureau of Land Management's September 2022 Notice of Intent to Prepare a Supplemental Environmental Impact Statement for the Proposed Ambler Mining District Industrial Access Road (EPA Project Number 17-0006-BLM). EPA has conducted its review pursuant to the National Environmental Policy Act and its authority under Section 309 of the Clean Air Act. The CAA Section 309 role is unique to EPA and requires EPA to review and comment publicly on any proposed federal action subject to NEPA's environmental impact statement requirement.

The Supplemental EIS (SEIS) will consider the effects of constructing and operating an over-200-mile-long industrial access road to the Ambler Mining District in the southern Brooks Range foothills of Alaska. The proposed road will be limited to industrial traffic for future mining activities. The project was originally analyzed in the March 2020 Final EIS and authorized in the July 2020 Record of Decision. The SEIS will provide additional analysis of subsistence impacts under Alaska National Interest Lands Conservation Act Section 810 and consultation with tribes pursuant to Section 106 of the National Historic Preservation Act.

EPA continues to support BLM as a Cooperating Agency in this review, and previously provided comments to BLM on the December 2018 NOI, October 2019 DEIS, and April 2020 FEIS.

EPA has concerns about the project's potential significant environmental justice impacts and recommends the SEIS analyze the impacts and detail how they may be avoided or mitigated. The following highlighted recommendations will most significantly help improve the SEIS analysis specific to EJ:

- Incorporate updated identification of potential communities with environmental justice concerns using the recently updated EJScreen tool.
- Host workshops with Alaska Native communities to identify key issues and potential resolutions in a collaborative environment.
- Including Traditional Ecological Knowledge from nearby Alaska Native communities to appropriately document the potential impacts to subsistence food sources, including the Western Arctic Caribou herd and its migratory corridors.

Enclosed are more detailed recommendations.

Thank you for the opportunity to provide scoping comments for this SEIS development process. If you have questions about this review, please contact Lauren Boldrick of my staff at (907) 271-5097 and [boldrick.lauren@epa.gov](mailto:boldrick.lauren@epa.gov), or me, at (206) 553-1774 or at [chu.rebecca@epa.gov](mailto:chu.rebecca@epa.gov).

Sincerely,

Rebecca Chu, Chief  
Policy and Environmental Review Branch

Enclosure

**USEPA Detailed Comments on the  
NOI for the Ambler Road Project  
North Slope Borough, AK  
November 2022**

**Coordination with Tribal Governments**

EPA encourages BLM to consult with, and incorporate feedback from, the Tribes when making decisions regarding the project. EPA recommends the NEPA document describe the issues raised during the consultations and how those issues were addressed.

**Environmental Justice**

EPA recommends that the EIS document clearly describe and document: identification of communities with environmental justice (EJ) concerns; any potential disproportionate impacts to communities with EJ concerns from the proposed project; the processes to meaningfully engage communities with EJ concerns throughout the NEPA analysis; and steps taken to address EJ concerns.

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs federal agencies to, among other things, identify and address the disproportionately high and adverse human health effects of federal actions on minority and low-income populations, to the greatest extent practicable and permitted by law. EO 13985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, includes a modern definition of equity that clarifies a broader approach.

Assessing EPA's Environmental Justice Screening and Mapping Tool (EJScreen) information is a useful first step in understanding locations that may be candidates for further review or outreach.<sup>1</sup> This tool has been updated in 2022 to include new data regarding health disparities, climate change, critical service gaps, threshold maps, and additional socioeconomic information. EPA recommends using this tool when analyzing the potential impacts of the proposed project to communities nearby. EPA considers a project to be in an area of potential EJ concern when an EJScreen analysis for the impacted area shows one or more of the twelve EJ Indexes at or above the 80<sup>th</sup> percentile in the nation and/or state. At a minimum, EPA recommends an EJScreen analysis consider EJScreen information for the block group(s) that contains the proposed action(s) and a one-mile radius around those block groups. Data for certain environmental indicators in Alaska are not currently available in EJScreen (e.g., PM 2.5, ozone, wastewater discharge). We recommend consulting state and local level data to determine the presence of other sources of environmental burden that may assist in the identification of communities with EJ concerns.

It is important to consider all areas impacted by the proposed action(s). Areas of impact can be a single block group or span across several block groups and communities.<sup>2</sup> When assessing large geographic areas, consider the individual block groups within the project area in addition to an area-wide assessment. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators.<sup>3</sup> As the screening tool does not provide data on every environmental impact and

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<https://ejscreen.epa.gov/mapper/>, accessed 11-1-2022.

<sup>2</sup> Agencies should define community as "either a group of individuals living in geographic proximity to one another, or a geographically dispersed set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions" (Interim Justice40 Guidance – Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad, January 27, 2021).

<sup>3</sup> <https://www.epa.gov/ejscreen/technical-documentation-ejscreen>, accessed 11-3-2022.

demographic factor that may be relevant to a particular location and/or proposed project, consider additional information in an EJ analysis to supplement EJScreen outputs. Further review or outreach may be necessary for the proposed action(s). To address these potential concerns, EPA recommends:

- Applying methods from "Environmental Justice Interagency Working Group Promising Practices for EJ Methodologies in NEPA Reviews" report, or the Promising Practices Report, to this project.<sup>4</sup> The Promising Practices Report is a compilation of methodologies gleaned from current agency practices concerning the interface of EJ considerations through NEPA processes.
- Characterizing project site(s) with specific information or data related to EJ concerns.<sup>5</sup>
- Describing potential EJ concerns for all EJ Indexes at or above the 80th percentile in the state and/or nation.
- Describing block groups that contain the proposed action and at a minimum, a one-mile radius around those areas.
- Describing individual block groups within the project area in addition to an area-wide assessment.
- Supplementing data with county level reports and local knowledge.

### ***Traditional Ecological Knowledge***

EPA recommends the SEIS include the identification, inclusion, and integration of Traditional Ecological Knowledge (TEK) into the NEPA analysis. This can include the collection of local and traditional knowledge concerning the affected environment, anticipated impacts from the project, as well as traditional hunting and land use patterns in the area. TEK could also be used to support the understanding of how climate change has impacted local environmental resources and subsistence resources. In addition to reviewing any pertinent traditional environmental knowledge currently available, additional studies and outreach may be conducted as necessary to clearly identify concerns and potential impacts, including cumulative impacts, from the proposed project and project alternatives.

### ***Subsistence***

EJ Screen analysis indicates that critical service gaps present in and around the project area include food deserts.<sup>6</sup> Given this EJ Screen data, as well as the high nutritional and cultural value of subsistence food within Alaska, EPA recommends analyzing the potential impacts of the proposed project and its reasonably foreseeable actions to the regional subsistence practices and economies. When analyzing the impact of the proposed action on subsistence practice, account for the unique cumulative impacts caused by remote geography (off the road system), regional food equity and importance of subsistence way-of-life practices experienced by communities in the proposed project area.

To analyze the impacts of the proposed project on subsistence practices and resources, EPA recommends that the SEIS document the baseline subsistence food consumption; changes in the quantity, quality, and/or perceived quality of subsistence foods due to the proposed project; and potential impacts in subsistence practices in response to changes in quality of subsistence resources. EPA notes impacts to sheefish, whitefish, salmon, and the Western Arctic Caribou Herd may be significant given

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<sup>4</sup> [https://www.epa.gov/sites/default/files/2016-08/documents/nepa\\_promising\\_practices\\_document\\_2016.pdf](https://www.epa.gov/sites/default/files/2016-08/documents/nepa_promising_practices_document_2016.pdf), accessed 11-3-2022.

<sup>5</sup> For more information about potential EJ concerns, refer to the July 21, 2021, Memorandum for the Heads of Departments and Agencies Interim Implementation Guidance for the Justice40 Initiative: <https://www.whitehouse.gov/wp-content/uploads/2021/07/M-21-28.pdf>, accessed 11-3-2022.

<sup>6</sup> <https://ejscreen.epa.gov/mapper/>, accessed 11-1-2022.

the high use by Alaska Native communities in the project area and recommends supplementing these discussions throughout the document with TEK.<sup>7</sup>

To address subsistence impacts, EPA recommends the SEIS develop and incorporate robust mitigation measures that aim to protect subsistence communities and subsistence resources from the development of the proposed roads and potential future mineral exploration and development activities. As an example, consider whether there are opportunities to provide limited, safe access to the proposed Ambler Road when the road is not in use for mine-related activities and/or during downtimes for the duration of the project.

### ***Environmental Justice Engagement***

EPA recommends the NEPA analysis provide opportunities for effective and meaningful public engagement during its environmental review. We recommend the following measures to further advance meaningful involvement:

- Carefully review and consider community feedback provided during the NEPA process. Given the project’s potential impact to subsistence practices and the EJ Screen data indicating vulnerability to accessible food resources within the project footprint: it will be important to ensure that the NEPA engagement approach is sensitive and responsive to the wellbeing of affected communities.
- Ensure that community feedback is reflected in the decision-making process. Design robust community engagement practices to maximize participation opportunities for communities that would be affected by the project, such as community-based workshops to facilitate discussion and issue resolution. Community-based workshops may also provide an opportunity to identify key issues and milestones for meaningful engagement in the NEPA process for the communities.
  - Provide early and frequent outreach and engagement opportunities to collect and incorporate community feedback throughout the NEPA process and to maintain maximum transparency.
  - Ensure that translation/interpretation services are provided to address language barriers for any linguistically isolated populations.
  - Address technology barriers that may prohibit participation from communities affected by the project.
  - Ensure that meetings are scheduled at a time and location that is accessible for community participants, including scheduling meetings after work hours and on weekends as appropriate.
  - Provide ample notice of meetings and commenting opportunities so that community members have sufficient time to prepare and participate.
  - Promote engagement opportunities within appropriate outlets used by affected communities, such as newspapers, radio, and social media.
  - Ensure that all project-related information is conveyed using plain language so that community members of varied reading proficiencies can readily understand the project-related information.

### **Health Impact Assessment**

EPA recommends the SEIS include a review of the Health Impact Assessment (HIA) and supplement it with updated information as appropriate (e.g., include TEK, update EJ Screen information, etc). EPA is

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<sup>7</sup> “November Meeting Minutes.” Northwest Arctic Subsistence Regional Advisory Council, U.S. Department of the Interior, Nov. 2021, <https://www.doi.gov/sites/doi.gov/files/r8-nwarac-fall-2021-meeting-minutes-final-signed-508.pdf>.

particularly interested in ensuring that the HIA considers the cumulative impacts to the affected communities and includes potential impacts to subsistence activities and harvest patterns associated with reasonably foreseeable mineral exploration and development activities.

The HIA offers insight into potential mitigation measures that could be analyzed in the SEIS, such as water and sanitation projects that may relieve stressors and burdens related to the impacts of climate change.

### **Climate Science and Policy**

Executive Order (EO) 13990 “directs all executive departments and agencies... to immediately commence work to confront the climate crisis.”<sup>8</sup> Responding effectively to the climate crisis will require both significant short-term global reductions in greenhouse gas (GHG) emissions and net-zero global emissions by mid-century or before. These and other policies reflect science based GHG emissions reduction goals to avoid the worst impacts of climate change. The most recent scientific reports by the Intergovernmental Panel on Climate Change (IPCC) reinforce the urgent need to take climate action.

Considering the extensive scientific information about the climate crisis and the climate impacts to Alaska, EPA recommends the SEIS prioritize the EO 13990 directive to immediately confront the climate crisis and identify means to further reduce GHG emissions from the proposed project. EPA recommends the SEIS reflect the national priority to confront climate change in:

- Identifying alternatives (e.g., alternatives which have fewer climate effects).
- The selection of the Preferred Alternative for the project.
- Describing available mitigation measures to reduce GHG emissions.
- Incorporating all practicable mitigation into the SEIS and identifying the commitments made to implement mitigation measures.

EPA recommends the SEIS document commitments to all practicable mitigation measures. Mitigation measures could include enhanced energy efficiency of components of the proposed project or integrated into the maintenance of the road, lower-GHG-emitting technology used for construction vehicles, and sustainable land management practices. We recommend that the climate change analysis be periodically reviewed and validated, perhaps every five years, for accuracy of facts and circumstances.

### ***Climate Change in Alaska***

EPA is concerned about the potential significance and intensity of climate change impacts in the proposed project area considering the rapidity of climate change in throughout Alaska as documented in the National Climate Assessment (NCA).<sup>9</sup> Alaska’s climate has warmed twice as fast as the rest of the nation, bringing widespread impacts including receding sea ice, melting glaciers, thawing permafrost, rising ocean temperatures, and ocean acidification. EPA recommends evaluating and incorporating TEK into adaptation and resilience planning as appropriate. There are about 23 local climate policies in the form of plans and assessments, as well as additional task forces, resolutions, and strategies in Alaska.<sup>10</sup> Over 19 climate action efforts (i.e., plans and strategies) have emerged from Indigenous communities

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<sup>8</sup> Executive Order 13990: Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis (January 20, 2021). Section 1. Accessible at: <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>, accessed 11-3-2022.

<sup>9</sup> “Fourth National Climate Assessment: Chapter 26: Alaska.” NCA4, U.S. Global Change Research Program, 2018, <https://nca2018.globalchange.gov/chapter/26/>, accessed 11-3-2022.

<sup>10</sup> A. Steffen, S. A. Greenlaw, M. Biermann, and A. L. Lovecraft (2021). Alaska’s Climate Change Policy Development. Fairbanks: Center for Arctic Policy Studies. Accessible at: <https://uaf.edu/caps/our-work/CAPS-alaskas-climate-policy-development-March2021-corrected.pdf>, accessed 11-3-2022.

and seven were developed at the scale of Tribal government. Because these actions overwhelmingly focus on assessing and adapting to the current impacts of climate change that are already impacting traditional Indigenous ways of life, these could be used as a guideline to develop additional strategies to mitigate and manage the potential impacts of climate change to this project. Analysis of these local climate policies could illustrate inconsistencies with state or local policies aimed at addressing the causes or impacts of climate change in the SEIS.

EPA recommends the climate change analysis include potential long-term impacts to the proposed project and potential maintenance requirements to adapt to changing climatic conditions. As an example, a recent study quantified the economic impacts of climate change on Alaska public infrastructure.<sup>11</sup> The cumulative estimated expenses from climate-related damage to infrastructure totaled \$5.5 billion (2015 to 2099) without adaptation measures. The study suggested that reducing GHG emissions could lessen damages by \$1.3 billion. The largest source of damages resulted from road flooding caused by increased precipitation followed by damages to buildings associated with near-surface permafrost thaw.<sup>12</sup> Smaller damages were observed for airports, railroads, and pipelines. Costs associated with adaptation measures for permafrost thaw were not quantified since it would be more expensive than complete infrastructure replacement. This study suggests that climate damages to infrastructure could extend well beyond areas underlain by permafrost and that greater attention to future flooding risks is warranted.

The NCA also indicates climate change in Alaska will strongly affect Alaska Native communities. EPA, therefore, recommends the description of the affected environment include any projected future changes, which may affect the proposed project, including the consideration of future climate scenarios, such as those provided by the NCA. If projected changes could exacerbate the environmental impacts of the project, the SEIS will need to consider these likely impacts in the NEPA analysis for the project.

### ***Greenhouse Gases***

EPA recommends the SEIS discuss the project-level GHG emissions over time in the context of GHG emissions reduction goals, including the U.S. economy-wide target under the Paris Agreement to achieve a 50 to 52 percent reduction from 2005 levels by 2030.<sup>13</sup> EPA also recommends the SEIS evaluate the alternatives by discussing measures to better align the project with the national 2050 net-zero GHG emissions goal, consistent with the *Long-Term Strategy of the United States*.<sup>14</sup>

### **Aquatic Resources, Wetlands, and Riparian Areas**

EPA previously made several recommendations on the 2019 Draft EIS and 2020 Final EIS that we recommend be more fully evaluated and described in the SEIS. The SEIS needs to describe aquatic habitats more fully in the affected environment and the potential environmental impacts of the proposed action, alternatives, and reasonably foreseeable actions (mine-related exploration, development, extraction, and closure activities) on these resources, including any expected change in functions they perform.

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<sup>11</sup> A.M. Melvina et. al. (December 27, 2016). Climate change damages to Alaska public infrastructure and the economics of proactive adaptation. *Proceedings of the National Academy of Sciences*, 114, no. 2 (2017): E122-E131. Accessible at: <https://www.pnas.org/doi/full/10.1073/pnas.1611056113>, accessed 11-3-2022.

<sup>12</sup> University of Alaska Fairbanks. "Alaska infrastructure at risk of earlier failure." ScienceDaily. ScienceDaily, 24 June 2021. Accessible at: [www.sciencedaily.com/releases/2021/06/210624161653.htm](http://www.sciencedaily.com/releases/2021/06/210624161653.htm), accessed 11-3-2022.

<sup>13</sup> See U.S. Nationally Determined Contribution (April 20, 2021).

<sup>14</sup> U.S. Department of State and U.S. Executive Office (November 2021). The Long-Term Strategy of the United States: Pathways to Net-Zero Greenhouse Gas Emissions by 2050. Accessible at: <https://www.whitehouse.gov/wp-content/uploads/2021/10/US-Long-Term-Strategy.pdf>, accessed 11-3-2022.



We recommend the SEIS address previous comments and provide updated information as available to clarify if outstanding data gaps in the delineation of aquatic resources, including an inability to detect small streams (< 12 feet wide), a lack of field data for the eastern 50 miles of the road, and a lack of summary results of validation or revision work have been addressed since the 2020 Record of Decision. Accurate baseline mapping of the aquatic resources is necessary to ensure the proposed road route and supporting infrastructure are aligned to minimize impacts resulting from the proposed project (e.g., direct impacts, resource fragmentation) to minimize potential impacts to subsistence resources. If future potential fieldwork is planned to investigate these issues, we encourage it be noted in the SEIS. Further, we suggest the SEIS fully evaluate and address each of these topics, particularly as field survey data of the proposed project area is collected.

With the addition of more accurate baseline data on aquatic resources in the project area, it is then necessary to describe avoidance and minimization measures to be utilized for the project to understand the potential impacts to subsistence resources. Where impacts to aquatic resources are unavoidable, the SEIS needs to fully consider the extent of the proposed project the functions and values of aquatic resources. Similarly, disclose in the SEIS data gaps and provide a realistic evaluation of those impacts to aquatic resources which could occur as a result of these data gaps (e.g., quantity of fish-bearing streams). Use this information to demonstrate the potential harm to the availability or perceived quality of fish used for subsistence purposes.

The BLM and U.S. Army Corps of Engineers Joint Record of Decision for the Ambler Road Project identifies the National Park Service (NPS) as having “the primary responsibility for requiring best management practices and mitigative measures that would result in a reduction of potential impacts to resources with the GAAR.”<sup>15</sup> EPA recommends the SEIS review mitigation measures to be required by the NPS within the GAAR and consider the application of these measures across the extent of the proposed road as a minimization measure, particularly if the proposed measure has the potential to lessen the impacts to subsistence users and resources.

EPA recommends the SEIS align with the regulatory requirements for the Clean Water Act Section 404 and provides, as a resource, EPA’s previous comments to the U.S. Army Corps of Engineers regarding the need for compensatory mitigation for unavoidable impacts to aquatic resources because of the proposed project.<sup>16</sup>

## **Water Quality**

Considering our previous comments on the 2019 Draft EIS and 2020 Final EIS, we continue to recommend evaluation of the impacts of future mine-related exploration, development, extraction, and closure activities. This is particularly important when considering the impacts to water quality, and in turn, local subsistence resources. We recommend the SEIS describe the existing water resource conditions (groundwater, surface water quality, and hydrology) and potential environmental impacts of the proposed action, alternatives, and reasonably foreseeable actions (exploration and mining). Both road construction and operation have the potential to contribute significant sediment to streams and may interrupt the surface and subsurface flow of water. The introduction of sediments to stream systems can alter thermal processes, consequently degrading water quality, and impacting fish and their habitat. Roads also contribute to habitat fragmentation and wildlife disturbance, as well as the introduction or

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<sup>15</sup> U.S. Department of the Interior Bureau of Land Management and U.S. Army Corps of Engineers. July 2020. Ambler Road Project Joint Record of Decision, p. 11.

<sup>16</sup> U.S. Environmental Protection Agency Region 10 letter to the U.S. Army Corps of Engineers, Alaska District in response to a Public Notice for POA-2013-00396, dated October 29, 2020.



exacerbation of invasive plant species. We note that water quality is one of the EPA's principal concerns at mine facilities that have acid generating and metal-leaching waste materials (waste rock, tailings, pit walls) that are exposed to the environment over long periods of time. Therefore, we recommend the proposed project, alternatives, and reasonably foreseeable actions be evaluated for their potential to alter stream and wetlands discharges or degrade riparian habitat and water quality.

The construction of roads and associated infrastructure may also compact the soil, thus changing hydrology, runoff characteristics, and ecological function of the area, affecting flows and delivery of pollutants to waterbodies directly influencing the quality and quantity of local subsistence resources. Therefore, we recommend that the SEIS include a detailed discussion of the cumulative effects from this and other projects on the hydrologic conditions of the proposed project area and transportation corridor(s). We recommend the analysis clearly depict the reasonably foreseeable direct, indirect, and cumulative impacts to groundwater and surface water resources. For groundwater (if applicable), the potentially affected groundwater basins should be identified and any potential for subsidence and impacts to springs or other open waterbodies and biologic resources should be analyzed.

Section 303(d) of the CWA requires states to identify waterbodies that do not meet water quality standards and to develop water quality restoration plans to meet established water quality criteria and associated beneficial uses. We recommend the SEIS disclose which waters may be impacted by the project, the nature of potential impacts, and specific pollutants likely to impact those waters, if applicable. It should also include any waterbodies potentially affected by the project that are listed on Alaska's most current EPA-approved 303(d) list. The SEIS should describe existing restoration and enhancement efforts for those waters, how the proposed project will coordinate with on-going protection efforts, and any mitigation measures that will be implemented to avoid further degradation of impaired waters. Currently, the Kobuk River is listed as a Category 3 waterbody in the Alaska Department of Environmental Conservation's *Alaska's Final 2012 Integrated Water Quality Monitoring and Assessment Report*, December 23, 2013, and given a high priority for water quality assessment.

Anti-degradation provisions of the CWA apply to those waterbodies where water quality standards are currently being met. In certain high-quality waters, the anti-degradation provisions prohibit degrading water quality unless it is determined that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In high quality waters that constitute an outstanding national resource, water quality must be maintained and protected [40 C.F.R. § 131.12]. We recommend that the project evaluation within the SEIS consider how the CWA antidegradation requirements will be met.

The SEIS should also disclose, under Section 402 of the CWA, any construction project disturbing a land area of one or more acres requires a construction stormwater discharge permit under the Alaska Pollutant Discharge Elimination System (APDES) permit program. We recommend the SEIS document the project's consistency with applicable storm water permitting requirements and should discuss specific mitigation measures, which may be necessary or beneficial in reducing adverse impacts to water quality. We also recommend the proposed road be designed with appropriate Best Management Practices for the ongoing prevention of sediment runoff concerns.

Finally, since construction and operation of the proposed road may impact sources of drinking water, and the Alaska Department of Environmental Conservation manages the state's Drinking Water Protection Program, EPA recommends the SEIS identify any public or private drinking water sources for communities within the project area, activities that could potentially affect drinking water wells or

source water areas, potential contaminants that may result from the proposed project and mitigation measures that would be taken to protect drinking water sources.

### **Air Quality**

Regarding our previous comments on the 2019 Draft EIS and 2020 Final EIS, we recommend the SEIS evaluate the impacts to air quality from reasonably foreseeable development (mine-related exploration, development, extraction, and closure activities). Future mineral exploration and development would cause immense changes in what is now a relatively undeveloped area and may have profound impacts to subsistence resources and activities.

We previously raised concerns about impacts to air quality and air quality related values such as visibility and plant/wildlife welfare. Given the emphasis of subsistence analysis for the SEIS, we encourage revisiting our previous air quality comments on this matter.

### **Hazardous Materials**

We recommend the SEIS address the potential direct, indirect, and cumulative impacts of hazardous materials/wastes management, transport, and storage from the construction and operation of the proposed project, alternatives, and reasonably foreseeable actions (mine-related exploration, development, extraction, and closure activities). Mining activities involve the transport of hazardous materials. EPA recommends the SEIS disclose the type and amounts of materials that will be used to support the reasonably foreseeable actions related to the proposed road. Releases of hazardous materials occur most often during transport and ore processing; to address these proposed operations, the SEIS needs to describe measures that will be taken to minimize the chances of an accidental release, the emergency measures that will be implemented should such an event occur, and how potential adverse impacts from spills may be mitigated by effective containment and cleanup operations.

We recognize that spill response in remote Arctic conditions is quite challenging for several reasons, with logistics being the most difficult challenge. This issue is apparent when attempting to deploy spill response equipment in a timely manner, but also trained personnel who are able to respond to hazardous materials releases appropriately and safely. Remote and Arctic weather in Alaska often has conditions that are very impactful to the mechanisms and techniques that can be used to respond to these events; cold temperatures can often impede the response capabilities. Once hazardous materials are contained, the next major challenge is disposing of the waste, which requires sending it out of state since there are no disposal facilities in Alaska. This is extremely costly. These challenges must be considered when determining the most appropriate strategy for dealing with spills and releases in varying conditions and seasons, including freeze-up, the winter season, and break-up.

We also recommend impacts to area users be identified, as well as any strategies employed to communicate risks or actual emergencies to those users. EPA encourages analyzing how a spill may impact subsistence resources in different seasons. These disclosures will benefit the public's understanding of the issues at hand and help develop mitigations measures that can be used to protect important subsistence or cultural use areas.

Finally, if any pesticides or biocides will be used during construction, operation, and maintenance of the project, the SEIS should address any potential toxic hazards related to the use of such substances and describe what actions will be taken to ensure that impacts from toxic substances to subsistence users will be minimized.

### **Reasonably Foreseeable Actions**

Appendix H of the 2020 FEIS provided a hypothetical mining baseline scenario that would result in 4 new mines with associated roads and airstrips in the mountains north of Kobuk and south of GAAR. EPA recommends that the SEIS provide the latest available information regarding reasonable and foreseeable mining exploration and development and update the direct, indirect, and cumulative effects analysis accordingly since the publishing of the July 2020 ROD. For example, include updates regarding any mining plan(s) of operation and restoration that have been developed or are currently in development or any necessary changes to assumptions made to forecast mining development. EPA recommends the SEIS summarize available information and update analyses to assess impacts more accurately from any expected mining proposals in the district and use of the road during the 50-year term of right-of-way authorization. Include ancillary infrastructure and facilities, and the possibility of any known or likely spurring of new secondary access roads and facilities that may tie into the proposed Ambler Road.

### **Mitigation and Monitoring**

On January 21, 2011, CEQ issued final guidance on the Appropriate Use of Mitigation and Monitoring. This guidance seeks to enable agencies to create successful mitigation planning and implementation procedures with robust public involvement and monitoring programs.<sup>17</sup> EPA recommends the SEIS identify the type of activities that would require mitigation measures during construction, operation, maintenance, and closure phases of this project. In addition, we recommend identifying whether or not implementation of the measure is required by a regulatory entity, and what entity will be responsible for implementing the measure. To the extent possible, mitigation goals and measurable performance standards should be identified in the SEIS to reduce impacts to a particular level or adopted to achieve an environmentally preferable outcome.

Design an environmental monitoring program to assess both impacts from the project and whether mitigation measures being implemented are effective. We recommend the SEIS identify clear monitoring goals and objectives, such as what parameters are to be monitored, where and when monitoring will take place, who will be responsible, how the information will be evaluated, what actions (contingencies, triggers, adaptive management, corrective actions, etc.) will be taken based on the information. Furthermore, we recommend the SEIS discuss public participation, and how the public can get information on mitigation effectiveness and monitoring results.

EPA recommends including monitoring and mitigation for subsistence practices that considers both the hunting practices and availability of the subsistence resource (e.g., caribou habitats and migration corridors within the project area which may be protected as a mitigation measure of the proposed project). Lands that are critical for the main subsistence species could be managed for the specific purpose of conserving fish and wildlife populations and their habitats. The development of a few large mines and potentially hundreds of small mines is likely to have significant impact on the flora and fauna that reside within it. This, in turn, will likely directly impact the integrity of the subsistence way-of-life practiced by the Alaskan Native communities that use those resources.

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<sup>17</sup> <https://www.federalregister.gov/documents/2011/01/21/2011-1188/final-guidance-for-federal-departments-and-agencies-on-the-appropriate-use-of-mitigation-and>, accessed 11-3-2022.